

CLAIMS

1. High-performance tyre for a motor vehicle, provided with a tread having an overall width L and comprising two deep circumferential grooves which separate a central region from two lateral shoulder regions, said shoulder regions being provided with shoulder blocks, characterized in that the sum of the widths of said lateral shoulder regions is equal to or less than 60% of said overall width L, in that the width of each of said shoulder regions is not less than 20% of said overall width L, in that each of said circumferential grooves is adjacent, on the side further from said central region, to a continuous track from which are branched transverse grooves which delimit said shoulder blocks.
2. Tyre according to Claim 1, characterized in that said continuous track terminates in a continuous wall which forms a lateral wall of said circumferential groove.
3. Tyre according to Claim 2, characterized in that said continuous lateral wall of at least one circumferential groove has a profile, in a radial plane, which is more inclined, with respect to a centre-line axis of said circumferential groove, than the profile of the facing lateral wall of said circumferential groove.
4. Tyre according to Claim 3, characterized in that said continuous lateral wall of said circumferential groove has an inclination in the range from approximately 14° to 24° with respect to said centre-line axis and a bottom radius R within a range from approximately 2 mm to 5 mm, while said facing lateral wall has an inclination in the range from approximately 3° to 10° with respect to said centre-line axis and a bottom radius R1 in the range from approximately 4 mm to 7 mm.
5. Tyre according to Claim 4, characterized in that said continuous lateral wall of said circumferential groove has an inclination of

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approximately 19° with respect to said centre-line axis and a bottom radius R of approximately 3.5 mm, while said facing lateral wall has an inclination of approximately 5° with respect to said centre-line axis and a bottom radius R1 of approximately 5 mm.

6. Tyre according to Claim 1, characterized in that at least one of said shoulder blocks has a side which is approximately transverse with respect to an equatorial plane.
7. Tyre according to Claim 1, characterized in that said central region comprises at least a first and a second circumferential row of central blocks, delimited by one of said circumferential grooves and by another deep circumferential groove
8. Tyre according to Claim 7, characterized in that said central blocks are of approximately rhomboid shape.
9. Tyre according to Claim 7, characterized in that said central blocks are approximately cusp-shaped.
10. Tyre according to Claims 1 and 7, characterized in that said central region also comprises a third circumferential row of inner central blocks, adjacent to a first annular projection, said third row of blocks and said projection being delimited by said other circumferential grooves.
11. Tyre according to Claim 10, characterized in that said inner central blocks have an approximately semi-parabolic shape.
12. Tyre according to Claims 7 and 8, characterized in that said blocks of said central rows are separated by transverse grooves having a bottom wall with a shaped profile of variable depth.
13. High-performance tyre for a motor vehicle, provided with a tread having a central region and two lateral shoulder regions, the central region being separated from each shoulder region by a deep circumferential groove, each shoulder region being provided with shoulder blocks separated by first transverse grooves,

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characterized in that said shoulder blocks are joined at one end by a continuous track which terminates in a continuous wall which forms a lateral wall of said circumferential groove.

14. High-performance tyre for a motor vehicle, provided with a tread having a central region and two lateral shoulder regions, the central region being separated from each shoulder region by a deep circumferential groove, each shoulder region being provided with shoulder blocks separated by first transverse grooves, characterized in that said shoulder blocks are joined at one end by a continuous track which terminates in a continuous wall which forms a lateral wall of said circumferential groove, said continuous lateral wall of at least one circumferential groove having a profile in a radial plane which is more inclined, with respect to a centre-line axis of said circumferential groove, than the profile of the other facing lateral wall of said circumferential groove.
15. Method for promoting a uniform distribution of a tread compound of a tyre during vulcanization in an appropriate mould, comprising the step of shaping profiles of bottom walls of transverse grooves of said tread with a variable depth to facilitate the longitudinal migration of said compound along the pitch sequence of said tread.